

REMARKS

Applicant has reviewed and considered the Office Action mailed on May 10, 2005, and the references cited therewith.

Claims 7, 8, 11, 14, 16, 19-25, 27, 28, and 30 are amended, claims 1-6, 26, and 29 are canceled, and claims 31-35 are added; as a result, claims 7-25, 27, 28, and 30-35 are now pending in this application.

§102 Rejection of the Claims

Claims 1-30 were rejected under 35 USC § 102(e) as being anticipated by Fazan et al. (U.S. Publication 2004/0021137A1). Paragraph 0098 of Fazan describes a condition where “0” is written with word line = $V_g = -1.5V$ and bit line = $V_d = -2V$; and paragraph 0099 of Fazan describes a condition where “1” is written with $V_g = 1V$ and $V_d = -2V$. In both cases, only the selected word line has different voltages; all unselected word lines remain unchanged. Also note that V_d is the same across both cases.

Claims 1-6 have been canceled, rendering this rejection moot with respect to those claims. The remaining independent claims have been amended to include additional limitations. Applicants respectfully submit that the amended claims are not anticipated by Fazan, nor are they obvious in view of the references of record.

Regarding independent claim 7, applicants respectfully submit that Fazan does not disclose, teach, or suggest the subject matter of claim 7, as amended, including for example, “at least one of the two phases utilizes a different word line voltage on an unselected word line.” The examiner’s attention is directed to Table 3 on page 11 of the application as filed. During a write of “0,” a word line voltage V_{w0U} may be presented on an unselected word line, and during a write of “1,” a word line voltage V_{w1U} may be presented on an unselected word line. Applicants respectfully submit that Fazan does not disclose, teach, or suggest the use of different word line voltages on unselected word lines. Accordingly, applicants respectfully believe that this rejection has been overcome with respect to claim 7, and that claim 7 is in condition for allowance. Further, applicants respectfully believe that claims 8-13 are in condition for allowance at least by virtue of dependency.

Regarding independent claim 14, applicants have added the limitation “increasing a voltage on unselected word lines.” Applicants respectfully submit that Fazan does not disclose, teach, or suggest increasing a voltage on unselected word lines during a write. Accordingly, applicants respectfully believe that this rejection has been overcome with respect to claim 14, and that claim 14 is in condition for allowance. Further, applicants respectfully believe claims 15-20 are in condition for allowance at least by virtue of dependency.

Regarding independent claim 21, applicants have added additional limitations describing a fourth voltage on unselected word lines that is different from a first word line voltage when holding the state of the memory cells. Applicants respectfully submit that Fazan does not disclose, teach, or suggest the subject matter of claim 21, as amended. Accordingly, applicants respectfully believe that this rejection has been overcome with respect to claim 21, and that claim 21 is in condition for allowance. Further, applicants respectfully believe that claims 22-24 are in condition for allowance at least by virtue of dependency.

Independent claim 25 has been amended to include the limitations of claim 26 as originally filed, and claim 26 has been canceled. Applicants traverse the rejection of claim 26 as filed, which corresponds to claim 25 as amended. The office action, at the first paragraph on page 6, states “[r]egarding claims 25-30, all the claimed features have been discussed in the preceding paragraphs.” Applicants respectfully disagree. Claim 26 as filed recites “a third voltage during the first phase *when coupled to an unselected row*.” [emphasis added]. Applicants respectfully submit that Fazan does not disclose, teach, or suggest modifying a word line voltage on an unselected row as recited in claim 25, as amended. Accordingly, applicants respectfully believe claim 25 is in condition for allowance. Further, applicants respectfully believe that claims 27 and 31 are in condition for allowance at least by virtue of dependency.

Independent claim 28 has been amended to include the limitations of claim 29 as originally filed, and claim 29 has been canceled. Applicants traverse the rejection of claim 29 as filed, which corresponds to claim 28 as amended. The office action, at the first paragraph on page 6, states “[r]egarding claims 25-30, all the claimed features have been discussed in the preceding paragraphs.” Applicants respectfully disagree. Claim 29 as filed recites “a third voltage during the first phase *when coupled to an unselected row*.” [emphasis added]. Applicants respectfully submit that Fazan does not disclose, teach, or suggest modifying a word

line voltage on an unselected row as recited in claim 28, as amended. Accordingly, applicants respectfully believe claim 28 is in condition for allowance. Further, applicants respectfully believe that claims 30 and 32 are in condition for allowance at least by virtue of dependency.

New Claims

Claims 31-35 have been added. Claim 31 depends on claim 25, which is believed to be in condition for allowance. Claim 32 depends on claim 28 which is believed to be in condition for allowance.

Applicants respectfully submit that Fazan does not disclose, teach, or suggest the subject matter of newly added independent claim 33, including for example, "increasing a voltage on unselected word lines during a memory device write cycle in which selected floating body transistors have their bodies charged." Accordingly, applicants respectfully submit that claim 33 is in condition for allowance. Further, applicants respectfully submit that claims 34 and 35 are in condition for allowance at least by virtue of dependency.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney Dana B. LeMoine at 952-473-8800 to facilitate prosecution of this application.

Respectfully submitted,

STEPHEN H TANG ET AL.

By their Representatives,

Customer Number 45445
952-473-8800

Date 8-10-05

By Dana B Le Moine
Dana B. LeMoine
Reg. No. 40,062

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O.Box 1450, Alexandria, VA 22313-1450, on this 10 day of August, 2005.

Chris Hammond

Name

Chris Hammond

Signature